

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1 - 23. Cancelled.

24. (Currently Amended) A solid, transparent organic silicone copolymer or hydrolysis product thereof, prepared by solution polymerizing monomers comprising:

a1) $\geq 50\%$ by weight of at least one vinyl ester of optionally branched alkyl carboxylic acids having from 1 to 15 carbon atoms, and

a2) from 0 to 20% by weight of one or more monounsaturated olefins and/or dienes, and

b) from 1 to 50% by weight of one or more silicones of the formula $R^1_a R_{3-a} SiO(SiR_2O)_n SiR_{3-a} R^1_a$, in which each R is an identical or different monovalent, optionally substituted C_{1-18} alkyl or C_{1-18} alkoxy radical, R^1 is a polymerizable group, a is 0 or 1, and n is 10 to 1000, from 85 to 100% by weight of the silicones b) containing one or two polymerizable groups, with silicones b) having only one polymerizable group (b1) used only in admixture with silicones b) having two polymerizable groups (b2) in a weight ratio b1):b2) $\leq 1:1$, and

c) from 0 to 10% by weight of one or more ethylenically unsaturated hydrolyzable silicon compound monomers or mercaptosilane monomers different from silicones b),

the amounts in % by weight for components a) to c) based on the overall weight of the monomers used and adding up to 100% by weight,

in a nonaqueous solvent mixture in the presence of at least one free-radical initiator, wherein the nonaqueous solvent mixture comprises a mixture of at least two nonaqueous solvents of which at least one has a transfer constant C_s to vinyl acetate of greater than 20×10^{-4} at $70^\circ C$,

wherein the silicone copolymer has a complex melt viscosity of from 5 to 30,000 mPa·s and a phase angle δ of $\leq 45^\circ$, measured at a temperature within the range of 100°C to 140°C, and optionally hydrolyzing the product thus obtained.

25. (Cancelled).

26. (Previously Presented) The product of claim 24, wherein at least one silicone b) is selected from the group consisting of α,ω -divinyl-polydimethylsiloxanes, α,ω -di(3-acryloyloxypropyl)-polydimethylsiloxanes, α,ω -di(3-methacryloyloxypropyl)-polydimethylsiloxanes, α -monovinyl-polydimethylsiloxanes, α -mono(3-acryloyloxypropyl)-polydimethylsiloxanes, α -mono(acryloyloxymethyl)-polydimethylsiloxanes, and α -mono(3-methacryloyloxypropyl)-polydimethylsiloxanes.

27. (Currently Amended) ~~The product of claim 24,~~ A solid, transparent organic silicone copolymer or hydrolysis product thereof, prepared by solution polymerizing monomers comprising:

a1) $\geq 50\%$ by weight of at least one vinyl ester of optionally branched alkyl carboxylic acids having from 1 to 15 carbon atoms, and

a2) from 0 to 20% by weight of one or more monounsaturated olefins and/or dienes, and

b) from 1 to 50% by weight of one or more silicones of the formula $R^1R_{3-a}SiO(SiR_2O)_nSiR_{3-a}R^1$ in which each R is an identical or different monovalent, optionally substituted C_{1-18} alkyl or C_{1-18} alkoxy radical, R^1 is a polymerizable group, a is 0 or 1, and n is 10 to 1000, from 85 to 100% by weight of the silicones b) containing one or two polymerizable groups, with silicones b) having only one polymerizable group (b1) used only in admixture with silicones b) having two polymerizable groups (b2) in a weight ratio b1):b2) $\leq 1:1$, and

c) from 0 to 10% by weight of one or more ethylenically unsaturated hydrolyzable silicon compound monomers or mercaptosilane monomers different from silicones b),

the amounts in % by weight for components a) to c) based on the overall weight of the monomers used and adding up to 100% by weight,

in a nonaqueous solvent mixture in the presence of at least one free-radical initiator, wherein the nonaqueous solvent mixture comprises a mixture of at least two nonaqueous solvents of which at least one has a transfer constant C_s to vinyl acetate of greater than 20×10^{-4} at 70°C ,

and optionally hydrolyzing the product thus obtained,

wherein silicone b) comprises α,ω -divinyl-polydimethylsiloxane(s); a binary mixture of α,ω -divinyl-polydimethylsiloxane(s) and α -monovinyl-polydimethylsiloxane(s); or a ternary mixture of α,ω -divinylpolydimethylsiloxanes, α -monovinylpolydimethylsiloxanes, and non-functionalized polydimethylsiloxanes.

28. (Previously Presented) The product of claim 27, wherein in the binary and ternary mixtures, the fraction of the non-functional polydialkylsiloxanes is up to 15% by weight, and the fraction of difunctional polydialkylsiloxanes is at least 50% by weight, based in each case on the overall weight of the silicone fraction b).

29. (Previously Presented) The product of claim 24, wherein said hydrolyzable silane monomers c) comprise ethylenically unsaturated and hence copolymerizable silicon compounds of the general formula $\text{R}^3\text{SiR}^2_{0-2}(\text{OR}^4)_{1-3}$, in which R^2 is a C_1 to C_3 alkyl radical, C_1 to C_3 alkoxy radical, or halogen; R^3 is $\text{CH}_2=\text{CR}^3-(\text{CH}_2)_{0-1}$ or $\text{CH}_2=\text{CR}^5\text{CO}_2(\text{CH}_2)_{1-3}$; R^4 is an optionally branched, optionally substituted C_{1-12} alkyl radical or is a C_{2-12} acyl radical, R^4 optionally being interrupted by an ether group; and R^5 is H or CH_3 .

30. (Currently Amended) ~~The product of claim 24,~~ A solid, transparent organic silicone copolymer or hydrolysis product thereof, prepared by solution polymerizing monomers comprising:

a1) $\geq 50\%$ by weight of at least one vinyl ester of optionally branched alkyl carboxylic acids having from 1 to 15 carbon atoms, and

a2) from 0 to 20% by weight of one or more monounsaturated olefins and/or dienes, and

b) from 1 to 50% by weight of one or more silicones of the formula $R^1R_{3-a}SiO(SiR_2O)_nSiR_{3-a}R^1$, in which each R is an identical or different monovalent, optionally substituted C_{1-18} alkyl or C_{1-18} alkoxy radical, R^1 is a polymerizable group, a is 0 or 1, and n is 10 to 1000, from 85 to 100% by weight of the silicones b) containing one or two polymerizable groups, with silicones b) having only one polymerizable group (b1) used only in admixture with silicones b) having two polymerizable groups (b2) in a weight ratio b1):b2) $\leq 1:1$, and

c) from 0 to 10% by weight of one or more ethylenically unsaturated hydrolyzable silicon compound monomers or mercaptosilane monomers different from silicones b),

the amounts in % by weight for components a) to c) based on the overall weight of the monomers used and adding up to 100% by weight.

in a nonaqueous solvent mixture in the presence of at least one free-radical initiator, wherein the nonaqueous solvent mixture comprises a mixture of at least two nonaqueous solvents of which at least one has a transfer constant C_s to vinyl acetate of greater than 20×10^{-4} at $70^\circ C$,

and optionally hydrolyzing the product thus obtained,

wherein monomer(s) a) are selected from the group consisting of vinyl acetate; vinyl acetate and ethylene; vinyl acetate and vinyl esters of α -branched monocarboxylic acids having 9 or 10 carbon atoms; and vinyl acetate, ethylene, and vinyl esters of α -branched monocarboxylic acids having 9 or 10 carbon atoms; and silicone(s) b) are selected from the group consisting of a binary mixture of α,ω -divinyl-polydimethylsiloxane(s) with α -monovinylpolydimethylsiloxane(s); and a ternary mixture of α,ω -divinylpolydimethylsiloxane(s), α -monovinylpolydimethylsiloxane(s), and non-functionalized polydimethylsiloxane(s).

31. (Previously Presented) The product of claim 24, wherein the solvent mixture comprises one or more solvents selected from the group consisting of

tetrahydrofuran, chloroform, heptane, cyclohexane, petroleum ether, diethyl ether, methyl ethyl ketone, p-dioxane, ethyl acetate, methyl acetate, isopropanol, ethanol, methanol, t-butanol, acetone, toluene, and benzene.

32. (Previously Presented) The product of claim 24, wherein the fraction of solvent with $C_s > 20 \times 10^{-4}$ in the solvent mixture is from 3 to 50% by weight based on the total weight of solvent.

33. (Previously Presented) The product of claim 24, wherein the solvent mixture comprises ethanol, isopropanol, or mixtures thereof.

34. (Previously Presented) The product of claim 24, wherein the solvent mixture comprises a mixture of ethyl acetate and isopropanol.

35. (Currently Amended) A process for preparing an organic silicone copolymer or hydrolysis product thereof of claim 24, comprising polymerizing:

a1) $\geq 50\%$ by weight of at least one vinyl ester of optionally branched alkyl carboxylic acids having from 1 to 15 carbon atoms, and

a2) from 0 to 20% by weight of one or more monounsaturated olefins and/or dienes, and

b) from 1 to 50% by weight of one or more silicones of the formula $R^1_a R_{3-a} SiO(SiR_2O)_n SiR_{3-a} R^1_a$, in which each R is an identical or different monovalent, optionally substituted C_{1-18} alkyl or C_{1-18} alkoxy radical, R^1 is a polymerizable group, a is 0 or 1, and n is 10 to 1000, from 85 to 100% by weight of the silicones b) containing one or two polymerizable groups, with silicones b) having only one polymerizable group (b1) used only in admixture with silicones b) having two polymerizable groups (b2) in a weight ratio b1):b2) $\leq 1:1$, and

c) from 0 to 10% by weight of one or more ethylenically unsaturated hydrolyzable silicon compound monomers or mercaptosilane monomers different from ~~silicionos~~ silicones b),

the amounts in % by weight for components a) to c) based on the overall weight of the monomers used and adding up to 100 % by weight,

in a nonaqueous solvent mixture in the presence of at least one free-radical initiator, wherein the nonaqueous solvent mixture comprises a mixture of at least two nonaqueous solvents of which at least one has a transfer constant C_s to vinyl acetate of greater than 20×10^{-4} at 70°C ,
and optionally hydrolyzing the product thus obtained.

36. (Previously Presented) The process of claim 35, wherein from 3 to 40 % by weight of a mixture of the monomers a), b), and optionally c) is introduced as an initial charge into a polymerization reactor, and the remainder of the monomers a), b), and optionally c) is metered in as a mixture.

37. (Previously Presented) The process of claim 35, comprising hydrolyzing an organic silicone copolymer product in alcoholic solution in the presence of an acidic or an alkaline catalyst.

38. (Currently Amended) A release agent or coating material for producing adhesive coatings, comprising the product of claim [[25]] 24.

39. (Currently Amended) A coating material for coating textile, paper, wood, films, or metals, comprising the product of claim [[25]] 24.

40. (Currently Amended) A weathering-resistant coating or sealant for use in architectural preservation comprising the product of claim [[25]] 24.

41. (Currently Amended) A polymer modifier or a water repellent, comprising the product of claim [[25]] 24.

42. (Currently Amended) A cosmetic additive, comprising the product of claim [[25]] 24.

43. (Currently Amended) A polish, comprising the product of claim [[25]] 24.

44. (Currently Amended) An antifoam, comprising the product of claim [[25]] 24.

45. (Currently Amended) A textile treatment composition, comprising the product of claim [[25]] 24.

46. (Currently Amended) In a cementitious or noncementitious construction material, wherein one or more polymer additives are employed, the improvement comprising employing as at least one polymer additive, the product of claim [[25]] 24.

47. (Previously Presented) The copolymer of claim 24 which contains from 5 to 40% by weight of polymerized silicone monomers b) based on the total weight of the copolymer.